

ABSTRACT OF THE DISCLOSURE

An ultra miniature high temperature capacitive inductive pressure transducer is fabricated by MEMS techniques. The transducer consists of two separated pieces of silicon which form the plates of the capacitor, one of which plate is micromachined in such a way to allow a controlled deflection with pressure. The gap between the two capacitive plates is determined by an extending rim on one of the two plates. The two pieces of silicon are subsequently fusion bonded, leading a very small gap between the two plates. An inductor is formed on the top surface of one of the pieces of silicon by sputtering metal in a spiral like fashion on the back side of the non-micromachined plate.

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